IMO 2020:

Update on Bunker Adjustment Factor (BAF) and new Environmental Fuel Fee (EFF)

Dear customer,

From 1st January 2020, a new regulation will come into force to reduce air pollution from ships globally. Whereas today ships can use fuel with up to 3.5% sulphur content (outside Emission Control Areas), the new global sulphur cap will be 0.5%.

The cost of compliance with the new regulation will be significant, so the cost of shipping will increase.

Update on Bunker Adjustment Factor (BAF)

As previously communicated, our revised Bunker Adjustment Factor (BAF) is designed to adjust contract rates within the duration of a contract, based on fluctuations in fuel-related costs. It applies to contracts with validity longer than 3 months.

In 2019, we have used the fuel price for high-sulphur fuel (3.5% sulphur) to calculate the BAF. From 1st January 2020, the BAF tariff will be calculated based on the fuel price for 0.1% sulphur gasoil with a fixed deduction of 50 USD/ton.

New Environmental Fuel Fee (EFF)

Effective from 1st December 2019, Maersk will introduce a Environmental Fuel Fee (EFF) on all trades, which will apply to all spot business and contracts with validity up to 3 months.

The EFF tariff will be trade-specific and reflect the fuel-related cost increases that result from compliance to the IMO 2020 regulation (calculated as the price difference between high sulphur fuel and low sulphur fuel multiplied by a trade factor).

The EFF tariffs will only be reviewed in case of significant fuel price fluctuations (more than 50 USD/ton).

The EFF tariffs applicable from 1st December 2019 will be announced end-October 2019.

Please do not hesitate contacting your local Maersk representative if you have any questions on the impact on your business of the IMO 2020 regulation.

Best regards,

Maersk Line
CUSTOMER-HANDOUT on IMO 2020 preparations:

- **UPDATE on Bunker Adjustment Factor (BAF)**
- **NEW Environmental Fuel Fee (EFF)**

**UPDATE on Bunker Adjustment Factor (BAF)**

As previously communicated, we have introduced a revised Bunker Adjustment Factor (BAF), which is designed to adjust the all-in freight rate as a result of fuel price fluctuations within the duration of a contract. The BAF is calculated as indicated below:

\[
\text{Fuel price} \times \text{Trade factor} = \text{BAF}
\]

**Example:** If we imagine a fuel price of 525 USD/ton, and we want to calculate the BAF tariff for our Asia-North Europe trade where the trade factor of 1.2, then the BAF tariff would become 
\[(525 \times 1.2) = 630 \text{ USD/FFE} \)

The BAF is applicable for customers with long-term contracts (i.e. rates with validity longer than 3 months), as a mechanism to reflect fuel cost changes within the contract period.

In 2019, we use the average fuel price for high sulphur fuel (3.5% Sulphur) for four key bunkering ports (Rotterdam, Singapore, Fujairah, Panama) to calculate the BAF. From 1\(^{st}\) January 2020 the BAF tariff will be based in the fuel price for compliant low-sulphur fuel.

**Fuel price to be used in 2020**

Contrary to our plans and expectations, it seems highly unlikely that there will be any well-established fuel price indices reflecting the actual trading prices for 0.5% sulphur fuels by the time we need to calculate BAF and EFF (based on all sources investigated so far).

We will instead use the fuel price index for 0.1% sulphur gasoil with a fixed deduction of 50 USD/ton. This means that if the fuel price index for 0.1% S gasoil is at 600 USD/ton, we will use a fuel price of 550 USD/ton for calculating our BAF.

The fixed deduction of 50 USD/ton reflects the current trading of 0.5% S fuels for 2020. We have made it fixed to ensure predictability of the BAF.

**Periodic tariff reviews**

The BAF tariffs will be reviewed quarterly, based on the fuel price for the 3-month period before the tariff announcement (for example, the Q4 2019 BAF tariff was calculated based on the average fuel price from 26\(^{th}\) May to 25\(^{th}\) August, communicated by end-August, and effective 1\(^{st}\) October).

**Extraordinary monthly BAF tariff reviews (2020 only)**

Due to the fuel market volatility caused by the IMO 2020 regulation, it is likely that we will see significant fuel price fluctuations in 2020. Therefore, we will review and adjust the BAF tariffs monthly in case of significant fuel price fluctuations during 2020.

If the average fuel price in a month (calculated from 26\(^{th}\) in one month to the 25\(^{th}\) in the next month) is more than 50 USD/ton higher/lower than the fuel price used for the last tariff calculation, this will trigger a tariff adjustment. The new tariff will be announced with 30 days’ notice, i.e. if a review was triggered by end of January, the new BAF tariff would be effective 1\(^{st}\) March.
NEW Environmental Fuel Fee (EFF)

As mentioned above, BAF is not applicable to spot and short-term business. However, the significant fuel cost increases expected around 1 January 2020 equally apply to this segment of customers.

Maersk will therefore introduce an **Environmental Fuel Fee (EFF)** for all spot business and contracts with validity up to 3 months. EFF will apply to all trades.

The EFF is calculated as follows:

\[
\text{EFF} = \Delta \text{Fuel price} \times \text{Trade factor}
\]

**Example:** If we imagine a fuel price difference between high sulphur fuel and low sulphur fuel of 175 USD/ton, and we want to calculate the EFF tariff for our Asia-North Europe trade where the trade factor of 1.2, then the EFF tariff would become \((175 \times 1.2) = 210\) USD/FFE.

**Effective date:**

The EFF will be effective from 1 December 2019. While the IMO 2020 regulation will be effective from 1 January 2020, we will start bunkering the new, more expensive fuels during Q4 2019, and we will do the switchover during December 2019 to ensure full compliance from 1 January 2020.

The EFF tariffs to be applicable from 1 December 2019 will be announced in a Customer Advisory by end-October 2019.

**Initial EFF tariff calculation**

The EFF will be trade-specific, and the initial tariff will be calculated as the price difference between high-sulphur fuel (3.5% fuel oil) and low sulphur fuel (same as used for BAF) multiplied by a trade factor (same as for BAF).

The fuel price will be calculated as the average fuel price for key bunkering ports (same for the BAF). We will use the average fuel price for the month of October 2019 (26th September to 25th October) to calculate the initial EFF tariff. The EFF tariff for reefer containers will be the EFF tariff for standard (dry) containers multiplied by a factor of 1.5. Please see table below for example EFF tariffs for sample trades.

**Tariff changes**

There will be no fixed periodic tariff reviews of the EFF, and the EFF tariff will only be reviewed in case of significant fuel price fluctuations. If the average low-sulphur fuel price in a month (calculated from 26th in the previous month to the 25th in the current month) is more than 50 USD/ton higher/lower than the low-sulphur fuel price used for the last tariff calculation, this will trigger a tariff adjustment. The new tariff will be announced with 30 days’ notice. Please see below example of a tariff change calculation.
Example scenario for EFF tariff change:

- If we imagine that the price for high-sulphur fuel was 350 USD/ton when we calculate the initial EFF tariff end-October 2019, and the price for low-sulphur fuel is 525 USD/ton. This means that the fuel price difference would be 175 USD/ton.

- For Asia-North Europe trade, this would result in a EFF tariff of (175 x 1.2) 210 USD/FFE.

- On 25 January, we might calculate that the average fuel price from 26 December 2019 to 25 January 2020 for low-sulphur fuel is now 558 USD/ton, i.e. 33 USD/ton more than it was when we calculated the EFF tariff in October. No tariff review would be triggered.

- On 25 February, we might calculate that the average fuel price from 26 January to 25 February for low-sulphur fuel is now 579 USD/ton, i.e. 54 USD/ton more than it was when we calculated the EFF tariff in October. A EFF tariff review would be triggered.

- The EFF tariff increase would be equivalent to 54 USD/ton multiplied with the trade factor. The increase would be added to the initial EFF tariff.

- For Asia-North Europe trade, the EFF tariff increase would then be (54 x 1.2) 65 USD/FFE, and the new EFF tariff would therefore be (210 + 65) 275 USD/FFE.

- The new EFF tariff would be effective on 1 April 2020.

- The fuel price of 579 USD/ton will be the new baseline for future EFF tariff reviews.